

REMARKS

Claims 16-29 stand rejected under 35 USC 102(b) as anticipated by Antonucci et al (US 5,927,772), a newly cited reference. Antonucci is relied upon for a showing of the entirety of all of the elements and structural interconnections claimed. This rejection is respectfully TRAVERSED as the Examiner has misread the reference.

Claims 1, 3 and 7-15 and 21 stand finally rejected under 35 USC 103(a) as obvious in view of newly cited art Antonucci et al. (US 5,927,772) when read with Detweiler (US 5,076,622). Antonucci is relied upon all of the claimed elements and claimed structural interconnections, except for a solenoid. Detweiler is relied upon for a solenoid to replace manual actuation. This rejection is also respectfully TRAVERSED because the Examiner has miss-read both of the references.

Claim 9 stands objected to for a grammar error, that being the missing "a" between "carries" and "recession" in line 2. Claim 9 has been amended to overcome this rejection.

Claim 1 has been amended to change "housing having sidewalls" to "housing having walls". No new matter has been added and no new consideration or search is necessary because a housing having sidewalls is also a housing having walls, and searching a housing having sidewall moots searching a housing having walls. Claim 1 has further been amended to delete the word "supported" in line 7.

Claim 16 has been amended at line 4 to insert the word -- two opposing -- before sidewalls. This amendment does not change the scope and meaning of the claim nor does introduce new structure as the previous language recited by this claim was: "*an elongate housing having sidewalls thereto...*". This previous language recites that the housing had sidewalls. The "s" on "sidewalls" means a plurality. Two is a plurality and means at least two. "Opposing" is a further limitation on the orientation and relationship of the two sidewalls. No new consideration or search is necessary.

Claim 22 has been amended at line 4 to correct the grammar of "connected to an outside of a said sidewall" to -- connected to an outside of one of said sidewalls --. No new structure has been added and the scope and meaning of the claim remains the same.

The claims 1,3 and 7-22 were examined in light of the species elected on January 23, 2003. Specifically, at that time applicant elected Figs. 1-43 and requested an examination of the claims with respect to these figures.

The specification describes (and drawings illustrate) applicant's elongate housing with two sidewalls and two curved endwalls (Fig. 17); and also describes (and illustrates) applicant's elongate housing with two sidewalls and one curved endwall and one flat endwall (Fig. 23). In both Figs. 17 and 23 applicant's housing is also shown as having a bottom.

It is understood by one of ordinary skill that applicant was reciting (in claim 16 and claim 22) an elongate housing with plural sidewalls as his existing terminology was sidewalls with an "s". From the description and drawings applicant has shown two parallel sidewalls to his housing. It is further understood by one of ordinary skill in the art that applicant is reciting (in claim 1) an elongate housing with plural walls. In this instance applicant has described and shown his housing (Fig. 17) as having four walls (two straight (or flat) sidewalls and two rounded end walls). Applicant has described and shown his housing (Fig. 23) also having four walls (two straight side walls, one rounded end wall and one flat opposite end wall).

It is well settled law that the claims of an application are to be interpreted in light of the specification and drawings. Specifically, the meaning of applicant's claim language is to be construed from his disclosure and drawings. *Markman v. Westview Instruments, Inc.*, 116 S Ct 1384 (1996). Applicant's structure is clear from her specification and drawings.

It is also well settled law that any technical terms not interpreted in light of the specification and drawings are to be taken in their ordinary sense, as defined in a Technical Dictionary or other defining publication.

While an applicant may be his own "lexicographer", his definitions must be sufficiently clear from the specification and any departure from common usage should be understood by one of experience in the field of the invention. *Multiform Desiccants, Inc. v. Medzam Ltd*, 133 F3d 1473, 45 USPQ2d 1429 (Fed. Cir. 1998); *Process Control v. HydReclaim Corp.*, 190 F3rd 1350, 52 USPQ2d 1029 (Fed. Cir. 1999). However, the Examiner is not permitted to become a lexicographer and is bound to the definitions of applicant's specification and common understanding of one of experience in the field of the invention.

Claims are to be read in a vacuum and limitations therein are to be read in light of the specification. *In re Marosi*, 710 F2d 802, 218 USPQ 289 (Fed. Cir. 1983). See also MPEP 2111.01. Where the specification (and drawings) explain (and illustrate) the meaning of terms, the claim must be given their meaning. *In re Zletz*, 893 F2d 319, 13 USPQ2d 1320 (Fed. Cir. 1989); *In re Vogel*, 422 F2d 438, 164 USPQ 619 (CCPA 1970).

The Commissioner has provided only one exception to this rule, that is where the applicant gives a meaning which is repugnant to the usual meaning of the term. See MPEP 608.01(0). No term may be given a meaning repugnant to the usual meaning of the term.

"Repugnant" is defined as "that which is contrary to what is stated before, insensible" *Black's Law Dictionary*, Revised Fourth Edition (West Publishing, 1968); and is defined as "1. characterized by opposition: INCOMPATIBLE, INCONSISTENT" *Webster's Third New International Dictionary* (G & C Merriam, Co. 1961)

Engineering analysis - Present Invention:

Applicant's invention (Figs. 17 and 23) has an elongate housing with four walls and a bottom. In Fig. 17 applicant shows his four housing walls being two opposing straight sidewalls and two rounded end walls that enclose his housing. In Fig. 23 applicant shows his four housing walls being two opposing straight sidewalls, one rounded end wall and one flat/ straight end wall.

In each of Figs. 17 and 23, applicant has his solenoid and its interceptor bar being inside of his housing, i.e., being attached to his housing at a location within (inside of) his housing. Therefore, applicant's solenoid and its associated locking member (interceptor bar) operate entirely within applicant's housing.

"Housing" is defined as: "2.a. something that covers, protects or supports. b. A frame, bracket, or box for holding or protecting a mechanical part." *Webster's II New College Dictionary* (Houghton Mifflin Co, 2001). Housing is also defined as: "A case or enclosure to cover and protect a structure or mechanical device." *McGraw-Hill Dictionary of Scientific and Technical Terms*, Sixth Edition (McGraw-Hill, 2003).

"Elongate" is defined as: "1. extended : lengthened" *Webster's*, supra. It is also defined as in elongation as: "The extension of the envelope..." *McGraw-Hill*, supra. "Side" is defined as: "1. b. surface bounding a solid figure. 7. One of two contrasted parts or places... identified by its location with respect to a center." *Webster's II*, supra; and is also defined as: "1. One of the line segments that bound a polygon. 2. One of the two rays that extend from the vertex of an angle." *McGraw-Hill*, supra. "End is defined as: "1. Either extremity of an object having length." *Webster's*, supra; and is also defined as: "see warp" *McGraw-Hill*, supra. The McGraw-Hill definition is not relevant. There a third source was reviewed. "End" is defined as: "2.: the extreme, ultimate or most remote section or area." *Webster's Third New International Dictionary*, supra. "Within" is defined as: "1a on the inside or on the inner side : INTERNALLY, inside". *Webster's Third New International Dictionary*, supra. It is also defined as: "1. In or into the inner part : INSIDE". *Webster's II*. A "solenoid" is "an electrically energized coil which produces a magnetic field within the coil". *McGraw-Hill*, supra. A "solenoid" is a "coil of wire commonly in the form of a long cylinder that when carrying a current resembles a bar magnet so that a movable core is drawn into the coil when the current flows". *Webster's Third New International Dictionary*, supra.

Applicant's use of these terms in his specification and claims is consistent with accepted definitions. An elongate housing is an extended one. An elongate housing has a long profile, which means it has sidewalls and end walls. The end walls are at the remote ends of the housing. In engineering terms the sidewalls of an elongate housing are on either side of the longitudinal centerline or longitudinal axis of the elongate housing. The end walls are cut by (intercept) the longitudinal centerline (or longitudinal axis) of an elongate housing.

A solenoid has a casing that covers the windings and holds the movable core that protrudes beyond the casing.

Applicant shows his solenoid 18/ 108 positioned within the walls of his elongate housing 12/ 102 (Figs. 17, 23). Applicant's solenoid core extension (his locking member) is therefore also inside of his housing, whereby applicant's intercepting means is positioned within his housing.

Engineering analysis - Antonucci:

Antonucci, the § 102(b) reference departs from applicant's structure. Antonucci's housing is not an "enclosure" type, but a "frame" type housing. Antonucci's housing is elongate and has a single longitudinal wall having a plurality of flanges and brackets extending outwardly there from to form such members as his lock plug socket 22 and his spring socket 50, and his flanges 13, 14, 25. The Antonucci flange 25 is his hook-shaped member that he expressly shows as extending from the top of his housing body 24. (Col. 3, lines 24-25). The hook-like flange 25 also extends rearward from the housing body portion 24. (Col. 3 at line 25).

In fact, all of these members 13, 14, 25, 22 and 50 each extend from the body 24 of the Antonucci housing 12 (Fig. 1). Antonucci shows an alternative embodiment for his handle/ paddle 211 in Fig. 7.

As Antonucci shows in Figs. 4 and 7, his spring locking member 53 with its retaining portion 54, and its engaging end 52 is positioned outside of his housing to extend longitudinally along the back face of his housing body 24 wall.

Antonucci shows a slot 27 which he says extends through his housing body 24 in a perpendicular relation to the vertical extending slot 26. (Col. 3, lines 31-35). Therefore, if the slot 26 is vertical, the slot 27 is horizontal.

Antonucci houses his lock plug 23 in his lock plug socket 22. The lock plug socket 22 has walls. However, Antonucci's interceptor (locking bar 53) does not and cannot operate within the walls of the lock plug socket 22.

Antonucci's interceptor means 53 is a spring locking member preferably comprised of spring steel composition or plastic composition such as acetal, durable enough to withstand the forces of actuation of the latch. (Col. 4, lines 31-34). Antonucci's interceptor means 53 has a paddle-engaging portion 52, a retaining portion 54, and a pawl-engaging portion 57.

The paddle 11 (operator handle) with its actuation arm 48 is positioned to engage the end 52 of the spring locking member 53. (Col. 4, lines 22-24).

The actuation arm 48 of the paddle 11 engages the paddle engaging portion 52 of the locking member 53 and the engaging portion is lowered into the lateral second slot 27 of the housing 12. By actuating the locking member 53 a portion of it is lowered a distance such that the pawl engaging portion 57 of the locking member, which engages the locking arm 37 portion of the pawl 28, is moved out of engagement thereby freeing the pawl 28 for pivoting. (Col. 5, line 3-11)

Antonucci's interceptor means does not move longitudinally (parallel to the longitudinal axis) of the housing. The paddle arm 48 bends it down, which is a direction perpendicular to the longitudinal axis of the elongate housing 12. While the paddle arm 48 forces the engaging end 52 of the interceptor 53 to "dip" into the housing slot 27, the actual pawl engaging portion 57 does not dip into the housing slot.

Moreover, while Antonucci expressly states that the end 52 is lowered within the housing slot 27, he does not state that the end 52 is lowered through the housing slot 27. This means that the end 52 never passes through the thickness of his housing wall.

Engineering analysis - Detweiler:

Detweiler discloses a fuel filler latch assembly (for an automobile). Detweiler has a housing 12 forming a chamber 14 (Fig. 1). Mounted through a flat wall of Detweiler's housing is his solenoid 32, Fig. 1, shown in partial cross-section detail in Fig. 7. Detweiler expressly requires a flat surface (planar inner wall portion 36 - col. 3, lines 36-41) so that only a portion of the solenoid assembly 32 extends into the housing 12.

As seen in Fig. 7 only the front flange of the solenoid case and the extreme projection of the solenoid pole piece 46 extend beyond the wall 36 of the housing 12. Clearly, the body of the solenoid, including its coil windings 44 are outside the housing 12.

This is intentional. One of ordinary skill in the art would realize why Detweiler requires his solenoid to be outside of the housing 12. The housing 12 is for a gasoline (fuel) filler pipe. Fuel fumes are very explosive. A solenoid works on electricity. Detweiler does not want an explosion.

Detweiler's solenoid, like all solenoids, follows Maxwell's Law of physics/ electricity and magnetism. The armature (pole piece 46) moves longitudinally left to right and right to left. The pole piece of a solenoid does not rotate (turn).

The Law:

In order to sustain a 35 USC 102 anticipation rejection, the Examiner is required to set forth in his Office Action the relevant teachings of the prior art relied upon, including making reference to the relevant column of page number(s) and the line number(s) where appropriate. Each claimed element must be shown in the reference. Each claimed interconnection of elements must be shown in the reference.

In order to sustain a 35 USC 103 obviousness rejection, the Examiner is required to set forth in his Office Action: (A) the relevant teachings of the prior art relied upon, including making reference to the relevant column of page number(s) and the line number(s) where appropriate; (B) the difference or differences in the claim over the applied reference(s); (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter; and (D) an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification. See MPEP 706.02(j). The Examiner has failed to adequately provide all four phases of this information. The MPEP is quite clear that all four phases (items (A) through (D)) must be made.

In order to establish a *prima facie* case of obviousness the following three basic criteria must be met: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to combine the specific reference(s) teachings; 2) there must be a reasonable expectation of success in combining the specific reference(s) teachings; and 3) the prior reference (or references when combined) must teach or suggest all of the claim limitations. See MPEP 706.02. The teachings or "suggestion to combine" and the "reasonable expectation of success" must both be found in the prior art and not based upon the applicant's disclosure. *In re Vaeck*, 947 F2d 488, 20 USPQ2d 1438 (Fed Cir 1991). The initial burden is on the Examiner to provide support for a *prima facie* case. *Ex parte Clapp*, 277 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

Conclusion:

The Examiner has described Antonucci's interceptor bar as being inside of his housing 12. This is not accurate.

To be inside of a housing the housing has to have walls. Antonucci's housing is a "frame" type housing, not a container type. The Antonucci housing has but one wall. The

one wall is the elongate single frame, his "spine" having the body 24. Both Antonucci and the Examiner have rightly placed Antonucci's hook-like shaped member 25 on the outside of Antonucci's wall (body 24). Specifically, Antonucci describes his flange 25 as being provided on the top of his housing body 24 and extends rearwardly from the housing body.

The Antonucci interceptor spring bar 53 has its retaining portion 54 outside of his lock plug socket 22 and outside of his housing. The interceptor bar 53 pawl-engaging portion 57 remains outside of his housing. The spring interceptor bar 53 paddle arm 48 engaging portion 52 is positioned outside of his housing and is forced to dip into the slot 27 in the housing wall, but not through the slot 27.

Moreover, Antonucci recites his spring interceptor bar 53 movement to be downward, which is perpendicular not parallel to the longitudinal axis of his housing. He recites his slot 27 as being horizontal.

Antonucci cannot anticipate the claimed invention. The 35 USC 102(b) rejection of claim 16-20 and 22 should be withdrawn immediately.

Likewise the 35 USC 103(a) rejection of claims 1, 3, and 7-15, and 21 should also be withdrawn immediately. There is no suggestion by Antonucci that a solenoid is needed or is useful for his latch. Moreover, there is no place to mount the Detweiler solenoid on the Antonucci "frame" type housing. The Antonucci housing has no appropriate flat wall for mounting. Moreover, as Antonucci's housing is a "frame" type (a single wall) there is no inside for a solenoid to be mounted.

Lastly, the Antonucci spring interceptor bar 53 is caused to dip by the rotation of the paddle 11 and the swing action (rotary motion) of its arm 48. As a solenoid is capable of only in and out motion, not rotary motion, it could not replace the motion of the paddle arm 48.

One of ordinary skill would have no motivation to add a solenoid to the Antonucci latch. There would be no expectation of success in combining Antonucci with Detweiler.



Any interpretation of the cited references which would anticipate or obviate the applicant's claims would be inconsistent with what is shown in the specification of the references and with what is shown in the specification of the present application, and inconsistent with the accepted meaning of words. That inconsistent interpretation would be repugnant to the Commissioner.

Claims 2, 4, 5, and 6 have been amended to depend from one of what must now be considered an allowable generic claim. Therefore, claims 2, 4, 5, and 6 have been reinstated. A new claim 23 has been added to depend from claim 22.

It is urged that the case be immediately passed to issue with claims 1 - 23.

Respectfully submitted,
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